

REMARKS

The present invention is a method of communicating information, a device for communicating information, and a device communicating compressed information. A method of communicating information in accordance with the invention compares a current list containing a plurality of current items, such as the current item list set forth at the top of pages 20 and 21 of the specification, with a reference list containing a plurality of reference items, such as the reference item list contained at the top of pages 20 and 21 of the specification. A type of classification is determined based on the comparing of the items of the list. Types of classification may be, for example, transformation case A, transformation case B or transformation case C with the type of determined classification being used to choose different encoding schemes. See page 8, lines 3-21, through page 9, lines 1-2.

Claims 1-50 stand rejected under 35 U.S.C. §103 as being unpatentable over United States Patent 5,864,860 (Holmes) in view of United States Patent 6,535,925 (Svanbro et al). With respect to independent claim 1, the Examiner reasons as follows:

As to claim 1, Holmes discloses a system for compressing a data sequence having a plurality of records. In particular, Holmes discloses the claimed features "comparing a current item list with a reference item list" (col.2, lines 13-46); and "determining a type of classification based on said comparing" as a match indication, responsive to a signal from the comparison step indicating that the data item matches the current field data item by a token indicating the match, wherein the data for that field is replaced by a token in the send record, this token indicating that the content of that field is the same as the content in the corresponding field (col.3, lines 3-15; col.4, lines 35-62). However, Holmes does not explicitly disclose a robust and efficient compression of list of items. On the other hand, Svanbro discloses an analogous

system which includes a method for efficiently compressing and reconstructing a header of a real time communication packet (col.2, lines 4-33).

Therefore, it would have been obvious to one having ordinary skill in the art combine the teachings of cited references, wherein the database server, provided therein (see Holmes' fig. 1) would incorporate the use of a robust and efficient compression of list of items, in the same conventional manner as disclosed by Svanbro. One having ordinary skill in the art would have found it obvious to utilize such a combination because that would provide Holmes' system the enhanced capability of efficiently compressing a header of a real-time communication packet.

Moreover, the Examiner applies the same reasoning in the rejections of claims 19-50 as stated at the bottom of page 9 and the top of page 10 of the Office Action. These grounds of rejection are traversed for the following reasons.

The Examiner erroneously concludes that Holmes discloses comparing a current list with a reference list. What Holmes teaches is that a data item in a current field of a current record is compared with a data item of a corresponding field of a preceding record. If a match occurs, the current data item is replaced by a token indicating the match which is preferably a single character in order to achieve maximum data compression. See column 2, lines 7-67, of Holmes.

Independent claim 1 recites:

A method of communicating information, said method comprising:

comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items; and

determining a type of classification based on said comparing of the items of the lists; and

using the determined type of classification to control how the information is communicated.

Independent claim 19 recites:

A method of communicating comprising:
classifying at least one item of a list containing a plurality of items;
based upon the classifying of the at least one item of the list forming a compressed list including said at least one item; and transmitting said compressed list.

Independent claim 32 recites:

A device for communicating compressed information, said device comprising:
a processor device for comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items and for determining a type of classification based on said comparing of the items of the lists and communicating the compressed information based upon the determined type of classification.

Independent claim 40 recites:

A device for communicating compressed information, said device comprising:
a processor device for comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items and for determining a type of classification based on said comparing of the items of the lists and communicating the compressed information based upon the determined type of classification.

Each of the independent claims recites either comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items (claims 1 and 32) or classifying at least one item of a list containing a plurality of items and based upon the classifying of the at least one item of the list forming a compressed list including at least the one item and transmitting the compressed list. Holmes' comparison of data items in a current field of a current

record with a data item of a corresponding field of a preceding record does not meet the foregoing limitations involving lists containing multiple items.

Moreover, the Examiner's reliance upon Svanbro regarding column 2, lines 4-33, does not cure the deficiencies noted above with respect to Holmes. Column 2, lines 4-33, describe the compression of the RTP time stamp field, but such description does not relate, pertain, or suggest to a person of ordinary skill in the art, the comparison of a current item list and a reference item list each containing multiple items followed by determining a type of classification based on the comparison of the items of the list and using the determined type of classification to control how information is communicated or communicating compressed information based upon a determined type of classification as recited in claims 1 and 32 and further classifying at least one item of a list containing a plurality of items; based upon the classifying of the at least one item of the list forming a compressed list including said at least one item and transmitting said compressed list as recited in independent claims 19 and 40. While Svanbro et al pertain to compression of RTP time stamps, they do not pertain to the aforementioned subject matter pertaining to the comparison of lists and the transmitting of compressed lists as recited in the claims.

It is submitted that if the proposed combination were made, the claimed subject matter of the independent claims would not be achieved in view of the deficiencies of Holmes not pertaining to the processing of the claimed lists and furthermore, while Svanbro et al do suggest compression of RTP time stamp fields, such a suggestion would not lead to the claimed subject matter.

Moreover, it is submitted that the Examiner is engaged in impermissible hindsight regarding the proposed combination. Svanbro et al's disclosure relating to

compression of RTP headers is non-analogous to Holmes' compression of structured data which does not relate to the compressed headers of Svanbro et al.

Regarding claim 2, the Examiner refers to column 2, lines 10-18 and column 3, lines 5-15 of Holmes regarding the claimed comparison determining a difference between said current item and said reference list. As pointed out above, Holmes does not pertain to the comparison of lists of multiple items and only compares a data item in a current field with a data item of a corresponding field of a preceding record which does not suggest a comparison of the current item list and the reference item list, each of which contain a plurality of items.

Claim 3 further limits claim 2 in reciting sending information regarding said difference from a first entity to a second entity. Since Holmes does not pertain to determining a difference between a current item list and a reference item list containing a plurality of items, the subject matter of claim 3 is also not met.

Claim 4, further limits claim 3 in reciting encoding said information regarding said difference prior to sending said information from said first entity to said second entity. The subject matter of claim 4 is also not met by the proposed combination of Holmes and Svanbro et al in view of the comparison not involving a current list and a reference list of multiple items with there being no suggestion of such encoding in the combined teachings of both references.

Claim 5 further limits claim 4 in reciting, "encoding said information comprises encoding information regarding a position of a newly added item to said reference item list." The Examiner recites column 5, line 15 through column 8, line 63. However, it is not understood in the referenced portion of Svanbro et al precisely what the Examiner considers to correspond to a position of a newly added item to said reference item list. If the Examiner persists in the stated ground of rejection, it

is requested that the Examiner point out on the record exactly which portion of the referenced portion of Svanbro et al reliance is being placed. Moreover, as stated above, there is no disclosure of the comparison of lists containing multiple items and therefore, there is no list containing a newly added item to the reference item list of multiple items.

Claim 6 further limits claim 4 in reciting wherein said information comprises encoding information regarding which item in said item list is not in said current list. It is noted that the Examiner again relies upon column 5, line 15 through column 8, line 63 of Svanbro et al. It is submitted that this subject matter is not suggested therein and it is requested that the Examiner, if the stated grounds of rejection are maintained, specifically identify which portion of Svanbro et al in the referenced portion on which reliance is being placed. Moreover, it is submitted that there is no disclosure of a reference list and a current list containing multiple items and therefore, there is no disclosure involving encoding information regarding which item in said reference item list is not in said current item list.

Claim 7 further limits claim 4 in reciting encoding said information comprises encoding information regarding content of at least one item in said reference list. It is again noted that the Examiner has relied upon column 5, line 15, through column 8, line 63 of Svanbro et al. As stated above, it is submitted that Svanbro et al do not disclose this subject matter. It is requested that the Examiner be more specific on the record if the Examiner persists in the stated ground of rejection of pointing out where information regarding content of at least one item in said reference item list containing multiple items is encoded.

Claim 8 further limits claim 4 in reciting wherein encoding said information comprises a combination of at least two of encoding information regarding a position

of a newly added item to said reference list, encoding information regarding which item in said reference list is not in said current list and encoding information regarding content of at least one item in said reference list. The Examiner again relies on column 5, line 15 to column 8, line 63 of Svanbro et al. It is submitted, as stated above regarding claims 5-7, that this subject matter is not taught by Svanbro et al. It is requested that if the Examiner persists in the stated ground of rejection, that the Examiner more specifically point out on the record which portion of Svanbro et al upon which reliance is placed.

Claim 9 further limits claim 1 in reciting that a compressed list is sent from a first entity to a second entity. As pointed out above with respect to claim 1, the combined teachings of the references do not teach the recited steps involving a current list and a reference list involving multiple items. Moreover, there is no teaching regarding sending a compressed list from a first entity to a second entity in combination with this subject matter. Column 4, line 63 through column 5, line 57 discusses the use of the transmitted tokens to decompress transmitted subject matter. However, this does not suggest sending a compressed list from a first entity to the second entity since all that is described is decompressing using a token which is not a compressed list.

Claim 10 further limits claim 9 in reciting wherein said compressed list includes information regarding a difference between said current list and said reference list. As has been stated above with respect to the rejection of claim 1, the combined subject matter of Holmes and Svanbro et al does not suggest the utilization of a current list and a reference list containing multiple items which are compared and furthermore, does not pertain to a compressed list including a difference between a current item list and a reference list.

Claim 11 further limits claim 10 in reciting that said difference is encoded within its compressed list based on a determined type of classification. As has been stated above with respect to the rejection of claim 10, there is no teaching of a compressed list and furthermore, there is no teaching that the compressed list is based upon a determined type of classification.

Claim 12 further limits claim 11 in reciting the information further comprises a type of encoding. Claim 12 is patentable for the same reasons set forth above with respect to claim 11.

Claim 13 further limits claim 12 in reciting that said type comprises one of an insertion encoding scheme, a removal of an encoding scheme, and a content change encoding scheme. It is submitted that the subject matter of claim 13 is patentable for the same reasons set forth above with respect to claim 11.

Claim 14 further limits claim 1 in reciting sending information regarding a difference between an item in said current list and a corresponding item in said reference list. Claim 14 is patentable for the same reasons set forth above with respect to claim 1 in that the proposed combination of references does not suggest a difference between an item in a current item list and a corresponding item in a reference list which lists contain multiple items.

Claim 15 further limits claim 1 in reciting that said type of classification is based upon at least one of whether an item in said reference list is in said current item list, whether said item is in said reference item list, and whether contents of said item in said current list are the same as contents of said item in said reference list. It is submitted that the proposed combination of a type of classification, as recited in claim 15, is not suggested by Holmes and Svanbro et al since the claimed reference

item lists are not disclosed as being compared to determine a type of classification which is used to control how information is communicated as recited in claim 1.

Claim 16 further limits claim 1 in reciting decompressing information sent from a first entity to a second entity. Claim 16 is patentable for the same reasons set forth above with respect to claim 1.

Claim 17 further limits claim 1 in reciting sending said reference item list from a first entity to a second entity. As stated above, the proposed combination of Holmes and Svanbro et al does not disclose a reference item list containing multiple items. Therefore, there is no disclosure of sending said reference item list from a first entity to a second entity.

Claim 18 further limits claim 17 in reciting decompressing information sent from said first entity to said second entity using said previously sent reference item list as a reference. Since there is no disclosure of sending a reference list containing multiple items, it further follows that there is no decompression involving a reference list.

The rejection of the other dependent claims is traversed for the same reasons set forth above regarding claims 2-18.

In view of the foregoing amendments and remarks, it is submitted that each of the claims in the application is in condition for allowance. Accordingly, early allowance thereof is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 C.F.R. §1.136. Please charge any shortage in fees due in connection with the

filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (0172.39133X00) and please credit any excess fees to such Deposit Account.

Respectfully submitted,

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Attachments

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